

U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
Reply to Office Action of March 6, 2006

**AMENDMENTS TO THE DRAWINGS**

One sheet of proposed amended drawings is submitted with this Communication.

U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
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### REMARKS

These remarks are intended to resolve drawing objections and claim rejections made under § 112. It is submitted that this Amendment should be entered because the claim amendments simplify issues on appeal. In particular, these issues must be appealed if they cannot be resolved prior to filing the appeal brief.

### Drawing Objections

The drawings stand objected to for not showing (1) data input for inputting patient data corresponding to a curvature of the patient's spine corresponding to factors independent of the curvature of the spine; (2) selecting a plurality of orthosis models; and (3) determining a curvature type on the basis of the patient's data.

With respect to the first basis for objection, Applicants' attorney submits that the claims do not recite "data input for inputting patient data corresponding to a curvature of the patient's spine corresponding to factors independent of the curvature of the spine." Claim 15 recites "a data input device for inputting a patient's data corresponding to a curvature of the patient's spine" and claim 18 recites "a device for obtaining the patient's data corresponding to factors independent of the curvature of the spine." Exemplary data inputs are shown at 104 in Figure 4, at 6 in Figure 5, and in Figure 6. An exemplary device for obtaining the patient's data corresponding to factors independent of the curvature of the spine is shown at 4 in Figure 5. It is therefore submitted that the features recited in the claims are shown in the drawings and the drawing objection should be withdrawn.

U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
Reply to Office Action of March 6, 2006

With respect to the second basis for objection, Applicants' attorney notes that this objection should have been made in the first office action. Original claim 17 recited selecting at least two orthosis models and the drawings were not objected to. To facilitate prosecution on this issue, a sheet with a proposed drawing revision to Figure 4 is submitted to overcome the objection.

With respect to the third basis for objection, Applicants' attorney submits that determining curvature type is shown at 106 in Figure 4, at 8 in Figure 5, and in Figure 6. It is therefore submitted that this feature recited in the claims is shown in the drawings and the drawing objection should be withdrawn.

#### Claim Rejections under § 112

Applicant's attorney first notes that rejections made under § 112 in the first office action were addressed; the amendment filed on December 19, 2005, was entered and therefore fully responsive. The currently pending rejections under § 112 are new and are addressed below in the order raised in the Office Action dated March 6, 2006. All of the claim amendments are addressed below.

Claims 1 and 15 stand rejected under 35 U.S.C. § 112 in that there is insufficient antecedent basis for "the patient's spine." Claim 1 has been amended to recite the term "spine" in the preamble and claim 15 has been amended to recite the terms "spine" and "patient" in the preamble. The application is directed to orthosis models for a patient's spine, as shown by the specification, the original claims, and the drawings. The terms "patient" and "spine" are not elements of the claim, but give life, meaning, and vitality to the claim. As a result, the respective

U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
Reply to Office Action of March 6, 2006

claim preambles should be construed as if in the balance of the claims. M.P.E.P. 2111.02, citing Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999).

Claims 1, 4, 15, and 18 stand rejected under 35 U.S.C. § 112 for the phrase "patient's data corresponding to factors independent of the curvature of the spine." It is noted that claims 1 and 15 do not recite "patient's data corresponding to factors independent of the curvature of the spine" and should therefore not be rejected. With respect to claims 4 and 18, the term "patient's data" is used in the specification and in the original claims as being a genus of information; the Examiner's attention is directed to page 10, lines 3 – 8; page 11, lines 4 – 8 and lines 21 – 26; and text starting at line 22 and ending at page 12, line 5. Data corresponding to the curvature of a patient's spine is a first species of the genus and data corresponding to factors independent of the curvature of the spine is a second species of the genus. Each species of data is associated with the patient, but different from one another. The construction of claims 4 and 18 delineates the different species of data from one another in a way consistent with rules of proper grammatical English. It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

Claim 1 stands rejected under 35 U.S.C. § 112 for the phrases "curvature type" and "predefined number of curvature types." Applicants' attorney first notes that both phrases were in the original claims and were not rejected in the first office action under § 112. In addition, it is noted that claim 1 defines what is meant by a single "curvature type" and also recites that the invention includes a data base with a predefined number of curvature types. Thus, the "curvature type" and the "predefined number of curvature types" are related as species

U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
Reply to Office Action of March 6, 2006

and genus, respectively, by proper grammatical English. For example, each curvature type is defined by a number of points of deflection of an abstract spine and one or more directions of curvature of the abstract spine and the invention includes a predefined number of curvature types stored in a data base. Claim 15 has been amended to read similarly with respect to claim 1 in this regard, further clarifying the relationship between the terms "curvature type" and "number of curvature types." It is therefore submitted that the rejection should be withdrawn. If the rejection is maintained, it is requested that the Examiner provide a clear explanation for the rationale in the written record for purposes of the appeal. M.P.E.P. § 706.02(j).

Claim 1 is also rejected under 35 U.S.C. § 112 at page 4 of the Office Action, lines 4 and 5. Applicant's attorney notes that this rejection is unclear in that the rejection is not complete sentence. No personal disrespect is intended; but, clarification for the record is requested if this rejection is maintained. It is important that the written record clearly explain the rationale for decisions made during prosecution of the application. M.P.E.P. § 706.02(j).

Claim 2 stands rejected under 35 U.S.C. § 112 for alleged lack of antecedent basis for the "inputting step." Applicants' attorney submits that claim 2 depends from claim 1 and the first step of claim 1 is an inputting step. It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

Claims 1 and 15 stand rejected under 35 U.S.C. § 112 in that the Examiner queries what is done with curvature determination device. In response the Examiner's question, as recited in the claims, the curvature determination device in claims 1 and 15 determines a curvature type of the patient's spine. It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
Reply to Office Action of March 6, 2006

Claims 1 and 15 stand rejected under 35 U.S.C. § 112 in that the Examiner queries what is done on the basis of the patient's data. In response the Examiner's question, as recited in the claims, the curvature determination is made on the basis of the patient's data corresponding to the curvature of the patients' spine. It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

Claim 4 stands rejected under 35 U.S.C. § 112 for lack of antecedent basis for "the patient's data corresponding to factors independent of the curvature of the spine." Claim 4 has been amended to remove "the" preceding "patient's data." This amendment clarifies that the species of the patient's data recited in claim 4 is different than the species of the patient's data recited in claim 1. It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

Claim 5 stands rejected under 35 U.S.C. § 112 for lack of antecedent basis for "the patient's data corresponding to factors independent of the curvature of the spine." Claim 5 has been amended to remove "the" preceding "patient's data." This amendment clarifies that the species of the patient's data recited in claim 5 is different than the species of the patient's data recited in claim 1. It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

Claim 9 stands rejected under 35 U.S.C. § 112 in that claim 9 depends from claim 9. Claim 9 has been amended to depend from claim 7. It is therefore requested that the rejection be withdrawn.

Claim 6 stands rejected under 35 U.S.C. § 112 for lack of antecedent basis for "predefined number of orthosis models in the database." Claim 6 has been amended to delete "in

U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
Reply to Office Action of March 6, 2006

the data base." Claim 1, from which claim 6 depends, recites "predefined number of orthosis models." It is therefore requested that the rejection be withdrawn. The Examiner has not rejected claim 9 for the same reason as claim 6; however, claim 9 also recited "in the data base" in conjunction with the "predefined number of orthosis models" and so has been similarly amended to remove "in the data base."

Claim 18 stands rejected under 35 U.S.C. § 112 for lack of antecedent basis for "the patient's data corresponding to factors independent of the curvature of the spine." Claim 18 has been amended to remove "the" preceding the first instance of "patient's data." Also, claim 18 has been amended to recite "corresponding to factors independent of the curvature of the spine" after the second instance of "patient's data" to clarify which species of patient data is being recited. These amendments clarify that the species of the patient's data recited in claim 18 is different than the species of the patient's data recited in claim 1. It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

Claim 19 stands rejected under 35 U.S.C. § 112 for lack of antecedent basis for "the patient's data corresponding to factors independent of the curvature of the spine." It is submitted that the amendments to claim 18 address and overcome the rejection of claim 19. It is therefore requested that the rejection be withdrawn.

Claim 20 stands rejected under 35 U.S.C. § 112 for lack of antecedent basis for "predefined number of orthosis models." Claim 20 has been amended to remove "predefined" preceding "number of orthosis models." Claim 15, from which claim 20 depends, recites "number of orthosis models." It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
Reply to Office Action of March 6, 2006

Claim 24 stands rejected under 35 U.S.C. § 112 for lack of antecedent basis for "predefined number of curvature types." Claim 24 has been amended remove the term "predefined" preceding "number of curvature types." Claim 15, from which claim 24 depends, recites "number of curvature types." It is therefore requested that the rejection be withdrawn or more fully explained pursuant to M.P.E.P. § 706.02(j).

Claim 10 has been amended to replace "step" with "steps" since the claim recites two steps.



U.S. Application Serial No. 10/802,315  
Attorney Docket: 604740-9  
Reply to Office Action of March 6, 2006

Conclusions

It is submitted that the proposed amendments do not affect the scope of the claims; the amendments are made to address a drawing objection and to address informalities under § 112. The amendments do not necessitate further search by the Examiner and would place the application in better form for appeal by simplifying the issues of appeal. The Amendments could not be made before because the Examiner did not raise the current rejections until finally rejecting the claims. The proposed amendments have antecedent basis in the application as filed and do not add new matter to the application.

Respectfully submitted,

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Date: 6/5/2006

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